

WHAT IS CLAIMED IS:

1. A line boring machine for boring holes in a bottom side of a work piece, the line boring machine comprising:

- a. a bed for receiving the work piece;
- b. a drill disposed below the bed and vertically traversable thereunder for working the bottom side of the work piece;
- c. a clamp disposed above the bed and vertically traversable thereabove for fixing a spatial relationship between the bed and the work piece;
- d. a drill linkage system attached to the drill;
- e. a clamp linkage system attached to the clamp; and
- f. a lever attached to the drill linkage system and the clamp linkage system such that a clamp downward force is mechanically and proportionally adjusted with respect to a drill upward force.

2. The line boring machine of Claim 1 wherein the lever defines a modifier pivot, clamp pivot and pedal portion, the lever is rotatable about the clamp pivot, the clamp pivot is vertically traversable and interposed between the modifier pivot and the pedal portion, the lever is attached to the modifier linkage system at the modifier pivot, the lever is attached to the clamp linkage system at the clamp pivot.

3. The line boring machine of Claim 1 wherein the bed defines a work pattern, the work pattern being at least one through-hole wherein the work pattern is capable of passing at least a portion of the modifier therethrough.

4. The line boring machine of Claim 1 wherein the modifier pivot is biased to a down position.

5. The line boring machine of Claim 4 wherein the modifier pivot is downwardly biased with a weight of the modifier.

6. The line boring machine of Claim 4 wherein the clamp pivot is biased to an up position.

7. The line boring machine of Claim 6 wherein the modifier pivot is upwardly biased with a spring.

8. The line boring machine of Claim 6 wherein the bias of the modifier pivot is less than the of the clamp pivot.

9. The line boring machine of Claim 1 wherein the clamp linkage system is at least one pull cable attached to the clamp and the lever.

10. The line boring machine of Claim 1 wherein the clamp linkage system comprises:

- a. at least one minor L-link attached to the clamp; and
- b. at least one major L-link attached to the minor L-link and lever.

11. The line boring machine of Claim 10 wherein the minor L-link(s) defines a fixed pivot, first leg and second leg, the first leg(s) of the minor L-link is attached to the clamp, the first and second legs are pivotable about the fixed pivot of the minor L-link, at least one first elongate bar is rotatably attached to the minor L-link(s) second leg(s), the major L-link(s) defines a fixed pivot, first leg and second leg wherein the second leg(s) of the major L-link(s) is rotatably attached to the first elongate bar, the first and second legs of the major L-link are pivotable about the fixed pivot of the major L-link, at least one second elongate bar is rotatably attached to the major L-link first leg(s) and the lever at the clamp pivot.

12. The line boring machine of Claim 1 wherein the clamp linkage system comprises at least one C-link attached to the clamp and the lever.

13. The line boring machine of Claim 12 wherein the C-link defines a base having a fixed pivot, first leg and second leg, the base, first leg and second leg are pivotable about the fixed pivot, the second leg is attached to the clamp, and an elongate bar is rotatably attached to the first leg of the C-link and the lever.

14. The line boring machine of Claim 1 further comprising a pressure applicator contactable to the pedal portion.

15. The line boring machine of Claim 14 wherein the pressure applicator is selected from the group consisting of solenoid, pneumatic cylinder, and hydraulic cylinder.